

## **ABSTRACT**

Associative Data Management and Knowledge Operating System using a Data Instance centric architecture, where Data Instances are typically atomic. Each Data Instance can be at the center with all its associations. The base structures encapsulate the Data Instances and can generally be identical in form and function, and application independent. Encapsulate references can include references to all other directly related independently encapsulated Data Instances. The encapsulated references can be both unique identifiers for each and every associated Data Instance and also logical indexes that encode the abstracted location of each Data Instance, making it possible to both identify and locate any Data Instance using the same reference key.